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ABSTRACT

The paper reviews the literature on information needs of parents and teachers of hearing impaired children and of the general public regarding hearing impairments. Survey results from a descriptive study on national patterns of information seeking and providing regarding hearing impairment are summarized in terms of information inquiries received by 1,057 organizations and information responses provided, and information needs of 550 individuals concerned with hearing impairment. Among findings were that 72% of the requests to organizations concerned local resources; topics of greatest requests included deafness in general, manual communication/sign language, lipreadng/speechreading/speech, and telecommunication devices; slightly over half of the organizations had a telecommunication device; and approximately one-third of all responding individuals appeared to be less than satisfied with the information services they received. Data suggested the need for wider dissemination of available information to individuals and information providers, and for focal points through which inquiries can be channeled so that requests are handled by those information providers best prepared to respond appropriately. Summaries of nine information centers and systems are provided. (CL)

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Information Needs and Services Related to Hearing Impairment*

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by

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* Paper presented at the May 18, 1982 meeting of the Tidewater Association for Hearing Impaired Children, Virginia Beach

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Information Needs and Services Related to Hearing Impairment

Charlotte Hawkins-Shepard, Ph.D.

This age has been called the "Golden Era of Information." The information explosion, which became evident in the 1960's, has accelerated with the development of new and cost-effective technologies such as microfiche, satellite transferral, word processing units, computerized bibliographic data bases, microcomputers, and computerized conferencing systems.

In federal, state, and local government agencies throughout the nation, the increase during the past few years in information services, workers, data bases, networks, and centers has been spectacular. We are becoming an information society with future capabilities almost beyond comprehension! But this wealth of information is basically useless if it cannot be readily provided to people who can benefit from it.

Overview of Information Services

Information services, information centers, and information retrieval systems are thoroughly reviewed by Lancaster (1979) in an introductory book on information science. This book explains just what information centers are supposed to be doing.

He identifies three major activities for information services: acquisition and storage of documents, their organization and control (e.g., classification, cataloging, subject indexing, and abstracting), and their distribution (or distribution of information concerning them) by means of circulation, literature searching, photocopying, etc.

He explains that people come to information centers with two kinds of needs: the need for problem-solving information, and information on new developments in a particular field (i.e., "current awareness need"). The ability of information centers to retrieve documents on a particular subject or to provide answers to specific questions is known as "information retrieval capability." Users may also have "known item needs." The ability of the center to supply known items, (e.g., particular documents for which authors or titles are known) is called the "document delivery capability."

Some evidence indicates many individuals do not recognize they have information needs. If they do recognize a need, Lancaster explains, they may not be able to express that need with sufficient precision to convert it into a demand on some information service.

Although individuals and groups concerned with handicapped persons have certain information needs in common with other groups and individuals, they have, as well, specialized information needs. Tonight, I'd like to highlight what research and experience have shown to be major needs and to discuss briefly the availability of information resources to meet these needs.

Information Needs Related to Hearing Impairment

Review of the Literature

Parents. The importance of proper information in helping parents of hearing impaired children decide which education course to follow has been emphasized often by writers in the field. Evidence is cited by Murphy (1979) that clear, sympathetically delivered information is critically important to a family's welfare when there is a handicap present. A former director of the International Association of Parents of the Deaf (Fairchild, 1979) in discussing concerns of parents, cites "education" as being most important and "communication" next in importance. Commenting on the latter she states:

> Communication--perhaps the most vital link in the life of any person--deaf, hard of hearing, or normally hearing--younger or old--communication has to be one of the biggest concerns of all parents. (p. 86)

Other areas identified by Fairchild as important to parents are "the older child," "employment," and "mainstreaming."

Teachers. Teachers also need useful information on hearing impairment, yet a review of the literature yields only a few studies dealing with this need. A study by Heiman (1966) addressed information that regular elementary classroom teachers have about speech and hearing problems. Using a 30-item questionnaire, she obtained responses from 55 out of 99 classroom teachers and learned that although 92% of the respondents had taken at least one course in speech, all but one indicated a desire to know more about speech and hearing problems.

Teachers of hearing impaired children. As part of an overall research study of facilities and services available in schools and classes for hearing impaired children in the United States, some data on teachers of hearing impaired children was obtained by Rawlings and Trybus (1978). They learned that in 1977, 8,528 individuals were full-time teachers of the hearing impaired. The majority of these teachers held a bachelor's or master's degree. The highest proportion of teachers certified by the Council on Education of the Deaf work in residential schools for the deaf. A more recent study specifically addressing the demographic characteristics of teachers of the hearing impaired was reported in 1980 by Jensema and Corbett. Data from mail questionnaires was obtained on 4,887 teachers from a population of 8,443. Of the teachers studies, 94% were white, 83% were female, 75% held a masters degree, 65% were under 35 years of age, and 61% were married, and 14% were hearing impaired. About half of the teachers reported they had worked in their present school system less than five years. The overall impression was that these teachers were basically a young, highly mobile, and relatively inexperienced group.

General public. The attitude and information about deafness on the part of the general public was studied by Horowitz & Rees (1962). Data was obtained on 266 subjects elementary school children, college students, and adults in a parent-teacher association. The found that deafness was consistently defined in terms of total lack of hearing; in all respondent groups, a tendency to be patronizing was shown; a clear understanding of the relationship of speech difficulty to deafness was seldom shown; a trend

toward the belief that the use of a hearing aid guarantees normal hearing was evident--as was a trend toward the belief that deaf persons can learn to speak as well as persons with normal hearing; no evidence was found of steady growth in information or maturity of attitude in any of the areas examined from the youngest children up through the adults.

Reports from the White House Conference on Handicapped Individuals (1978) have included recommendations for public education programs about persons with disabilities. The Implementation Plan report (White House Conference on Handicapped Individuals, 1978) specifically states:

> The depiction of handicapped individuals that is presented to the public is usually that of a person seemingly helpless, needy and neglected. It might also be of a handicapped person who, with extraordinary effort, has overcome obstacles seemingly contrived to defeat the person's achievement of a chosen goal.
>
> Neither of these images accurately represent the millions of handicapped individuals in our society. However, these misconceptions of people with disabilities stimulate the public to hold an attitude that handicapped individuals are "different;" therefore, a better balance and range of images is required to assist many of the general public in overcoming their feelings that unique behavior is called for when meeting or relating to a person with a disability. (p. 39)

Surveys on Needs and Services Related to Hearing Impairment

Kendall Green survey. Gallaudet College has for over 100 years, served as a resource on deafness. Traditionally requests for information have gone to a variety of individuals and offices on the campus. We conducted

an extensive in-house study two years ago to determine the nature and extent of information services provided through the various offices at Gallaudet. From 137 Gallaudet offices, 113 usable questionnaires (85%) were returned. Of these 113 offices, 100 indicated receiving information requests from outside the Gallaudet community. Results showed that in 1979 Gallaudet received over 121,000 inquiries regarding hearing impairment and related subjects. Twenty-five offices reported receiving over 500 inquiries per year, mostly from professionals and parents. Most (89%) came by letter. Over 130 different topics were cited. Of the offices that receive 2,000 or more inquiries per year, topics frequently reported were: deafness in general, sign language, careers in deafness, career education of the deaf, Cued Speech, deaf adults, achievement tests, postsecondary programs, advocacy and legal rights, and the deaf student population in the United States.

National Survey on Needs and Services Related to Hearing Impairment. A descriptive study of national patterns of information seeking and providing in the area of hearing impairment was conducted recently at Gallaudet College (Hawkins-Shepard, 1981). Two mail questionnaires were developed for this study. The first was sent to a stratified random sample of 1,425 (out of 3,653) organizations that provide information and services in the area of hearing impairment. The second was sent to three groups of administrators, and to staff at the International Association for Parents of the Deaf (IAPD). Distribution to a total of 1,249 individuals concerned with hearing impairment was planned, and distribution was made to 955 individuals.

Responding organizations totalled 1,099 (77%) from which the usable returns were 1.057 (74%). Responding individuals totalled 579 (60%), from which the usable returns were 550 (57%).

Information Inquiries. Of the 1,057 organizations in the sample, 921 (87%) received information requests (see Table 2). Of the 547 individuals responding to the item, 472 (86%) reported that they have made information inquiries related to hearing impairment. Organizations received a mean of 13 and a median of 4.6 requests per week.

A mean of 72% of the requests to organizations in the sample concerned local resources; the mode, or most frequently reported percentage for questions about local resources was 90%. Most requests made by individuals in the sample were evenly distributed (mode = 50%) between those for obtaining services and those on general information.

Over half of the organizations reported receiving requests from inquirers in each of 14 categories specified. Comparably, each of the 12 information sources specified were used by at least some of the responding individuals. As indicated in Table 3, information inquiries from parents, relatives, and friends of deaf children were reported by 96% of the responding organizations. Of the "professional organizations for national information and service," 61% said they received inquiries daily from the general public. Teacher inquirers were reported by 86%, and university student inquirers were reported by 85% of the responding organizations. Other inquirers reported by a substantial percentage of organizations were: deaf adults (84%); audiology/speech pathology professionals (79%); researchers (75%); government agencies (75%); mental health professionals (69%); news media representatives (69%); religious groups (55%); and police officers (53%).

When individuals were asked about sources to which they had made inquiries, the university students, teachers, and parents showed some consistency in use patterns (see Table 4). Of the 12 sources specified, all were checked by at least some of the university students, and teachers, and all but one (ERIC Clearinghouse on Handicapped and Gifted) were checked by both Group II and Group III (IAPD) parents. Sources were ranked within categories of individuals, according to numbers of subjects reporting usage of them. Use by university students of specific sources other than colleges was heaviest for the Alexander Graham Bell/Volta Bureau (49% of responding students), National Association of the Deaf (43%); Gallaudet (40%); and the Council for Exceptional Children (27%). Use by teachers was heaviest for Gallaudet (54%); Alexander Bell/Volta Bureau (49%); other colleges (43%); the National Association of the Deaf (42%); and the John Tracy Clinic (19%). Use by parents differed for most sources, except for "school office," used by slightly over 50% of each parent group. Usage of IAPD parents was heaviest for the following sources outside of IAPD itself: the John Tracy Clinic (74%), Gallaudet (58%); the National Association of the Deaf (56%); Alexander Graham Bell/Volta Bureau (41%); Closer Look (32%); and other colleges (30%).

Topics on which the greatest percentage of organizations (85% or more) received inquiries included: deafness in general, manual communication/ sign language, lipreading/speechreading/speech, interpreter services, hearing aids, and telecommunication devices. At least three-fourths of the organizations received information inquiries on: mainstreaming, multiply

handicapped deaf people, philosophy/methods of teaching deaf children, parent education, diagnostic instruments, and medical/diagnostic subjects.

Topics inquired about by individuals varied within role categories. However, the following topics (in order of number of individuals specifying them) were asked about by the greatest number of persons in all categories: Deafness in general, parent education, manual communication, education programs for children, hearing aids, curriculum, mainstreaming, and philosophy or methods of teaching. Topics (in rank order) asked about by the greatest number of university students were: Deafness in general, teacher certification requirements, teacher training programs, manual communication systems, education programs for children, and curriculum.

Topics asked about by teachers included: curriculum, parent education, deafness in general, teacher certification requirements, education programs for children, and manual communications systems. Important to all responding parents with little difference between the two parent groups were the following topics: Philosophy or methods of teaching, lipreading/speechreading/speech, and curriculum. Within the two categories of responding parents, strong differences existed. The greatest number of Group II Parents asked about hearing aids, audiological testing, deafness in general, education programs for children, parent education, mainstreaming, philosophy of teaching and manual communication systems. Group III (IAPD) parents asked about deafness in general, manual communication, parent education, education programs for children, hearing aids, audiological testing, parent groups and telecommunication devices.

For each of the topics specified, some organizations had information available to provide to persons making inquiries. However, not all organizations were able to provide information on all topics about which they receive inquiries. The total number of organizations with information available per topic was smaller than the total number receiving inquiries per topic. As Table 5 illustrates, the greatest differences found were between inquiries on and information available about the topics--multiply handicapped deaf people, mental health, and hearing loss in the elderly.

Information Responses Provided. As an index of sensitivity to the communication needs of deaf persons, ownership of telecommunication devices was surveyed. Slightly over half (55%) of the organizations have a telecommunication device. The wide amount of variance among groups is readily apparent. Telecommunication devices are owned by all but one of the responding postsecondary programs. About three-fourths of the rehabilitation agencies/centers, community service centers, senior citizen center, mental health facilities and social/recreational organizations have such a device. However, slightly less than one-fourth of the responding speech and hearing centers have a telecommunication device.

Over two-thirds of the organizations use individualized letters, form letters, telephone/TTY calls, meetings/personal consultation, and referral as a means of responding to information inquiries. Individualized letters are used at least once a week, by two-thirds of the professional organizations for national information and service.

Most individuals made their first request in writing. There was a sharp decrease in methods that ranked second ("telephone/TTY"), third ("in person"), and fourth ("through another person"). Also, most individuals commonly use writing to request information.

Over half of the responding organizations prepare fact sheets, brochures, packets, publications, or bibliographies related to hearing impairment. About 90% of the organizations prepare materials for laypersons; 70% prepare materials for professionals. Many organizations specified that they prepare materials for parents, writing in "parents" under the category "other."

Individuals were asked to list up to six subjects on which they would find printed material most useful. A total of 110 topics were identified by respondents, with the topic "deafness in general" listed most frequently. The next most frequently cited topics were the following: Work opportunities for deaf people, parent education, laws affecting the deaf, curriculum, mainstreaming, and educational programs for children.

In order to prepare responses, over 70% of the organizations have their staff search for available information, and ask other agencies to provide them with information to forward to inquirers. Few organizations contract with consultants to prepare materials. Over three-fourths of the organizations, including all the mental health facilities, use lecture and speaker services as part of their outreach activities. Somewhat fewer use displays/demonstrations and workshops. Less than one-fourth use unsolicited mailings. Wide variability exists on the whole, with regard to types of outreach activities used, among categories of organizations.

Only 13% of the organizations indicated they usually are able to answer all inquiries. As shown in Table 6 community service centers and senior citizen organizations most often indicated that they could answer all

inquiries received, but even here only 17% made this claim. When unable to answer inquiries, nearly all organizations make referrals.

Approximately one-third of all responding individuals appeared to be less than satisfied with information services they have received. Of the responding university students, 38% indicated their degree of satisfaction as "neutral or dissatisfied." Of both groups of responding parents, 31% indicated their degree of satisfaction as "neutral or dissatisfied." Of the responding teachers, 29% indicated their degree of satisfaction as "neutral or dissatisfied."

Conclusions. A large number of the organizations sampled devote significant amounts of time and effort attempting to meet information needs in the area of hearing impairment. A large number of the individuals sampled have made requests for information related to hearing impairment. The results of both surveys underscore the many and diverse sources to which inquirers, particularly those laypersons and/or parents and others seeking information of a general nature, as well as on services, make requests.

The importance of organizations' sensitive and comprehensive replied to written inquiries, particularly those of parents, is suggested by the findings.

The need for wider dissemination of available information to individuals and information providers is suggested by the data. Information services relating to hearing impairment have not been viewed as satisfactory by many organizations and individuals. Data suggest the need for focal points through which inquiries can be channeled so that requests are

handled by those information providers best prepared to respond appropriately. Findings suggest the importance to organizations and individuals concerned with hearing impairment of a toll-free number, a listing of materials available, and the use of objectivity in information services.

Information Centers and Systems

Various directories and guides are available which indicate the different clearinghouses and information centers throughout the U.S. Of particular note among these are the Directory of National Information Sources on Handicapping Conditions and Related Services published by the Clearinghouse on the Handicapped. The 1980 directory is in the process of being updated but should be out shortly.

Following are thumbnail sketches of key national information systems, starting with the ERIC Clearinghouses.

Educational Resources Information Center (ERIC)

Established in 1966, ERIC is an information network of 16 subject area clearinghouses, which acquire and catalog documents for announcement in the abstract journal Resources in Education (RIE) and provide other user services. ERIC's several components include: A central processing facility, where documents are received and system support is provided; an ERIC Document Reproduction Service (EDRS), which films documents and produces microfiche for sale; a contractor, which publishes Current Index to Journals in Education (CIJE); the publication Resources in Education (RIE); and a central ERIC management team within the National Institute of

Education (NIE), which manages the contracts and sets policy for the system. The 16 ERIC Clearinghouses (see Table 1) span the entire field of education, covering educational subject areas, levels of education, or significant educational problems. Of interest to professionals working with hearing impaired persons is the ERIC Clearinghouse on Handicapped and Gifted Children, at the Council for Exceptional Children.

ERIC Clearinghouse on Handicapped and Gifted Children
The Council for Exceptional Children
1920 Association Drive
Reston, VA 22091

The Eric Clearinghouse on Handicapped and Gifted Children and Youth collects, processes, and disseminates information on the education of children and youth deemed exceptional: the gifted, the talented, the aurally handicapped, visually handicapped, mentally handicapped (retarded), developmentally disabled, physically handicapped, socially maladjusted, emotionally disturbed, abused/neglected, speech impaired, learning disabled, neurologically handicapped, autistic, culturally different handicapped or gifted, multiply handicapped, and severly handicapped.

Major areas include:

- Behavioral, psychomotor, and communication disorders.
- Cognitive functioning and learning problems of exceptional children.
- Administration of special education programs and services.
- Preparation and continuing education of professional and paraprofessional personnel in special education (including competency based teacher education).
- Preschool learning and development of the exceptional child.

- Statistics and incidence data relating to exceptional children.
- Mainstreaming of exceptional children, more specifically, education in the least restrictive environment.
- Theory, treatment, and prevention of child abuse and neglect.

The Council for Exceptional Children (CEC)
1920 Association Drive
Reston, VA 22091

The Council for Exceptional Children is a professional association whose purpose is to advance the education of all exceptional children, handicapped and gifted. Although CEC is a membership organization, many of its services are available to any person concerned with special education. CEC's major activities include information services, publications, conventions and training, and governmental relations. The Council provides comprehensive information center and identifies and collects literature on the education of handicapped and gifted children, much of which is unavailable from commercial sources. CEC periodicals include Exceptional Children, CEC's official journal, which emphasizes current issues, research, and trends in special education; TEACHING Exceptional Children, which includes information on teaching practices and learning materials; Exceptional Child Education Resources, which provides citations of all publications stored in CEC's information system, and Update, a periodic newsletter. CEC's governmental relations unit monitors and lobbies for federal, state, and local government actions that influence the education of exceptional children. The unit maintains a comprehensive data bank on state and federal legislation, regulations, and litigation concerning special education. It provides up-to-date information to CEC's Political Action Network (PAN) which is organized on a statewide basis.

National Rehabilitation Information Center (NARIC)
8th & Varnum Street, N.E.
Washington, D.C. 20064

The National Rehabilitation Information Center established in 1977 is located on the campus of the Catholic University of America. Funded by the National Institute of Handicapped Research, Department of Education, NARIC works to improve information delivery to the rehabilitation community by supplying copies of research reports, audiovisual materials prepared with RSA funding, journal articles, conference proceedings, other types of publications, and bibliographies tailored to specific requests. It publishes a periodic newsletter entitled the Pathfinder. Although NARIC is a research library, it does not have a card catalog in the traditional sense of the word. The catalog is "on-line" and accessible through the vendor Bibliographic Retrieval Services. This NARIC database contains bibliographic information on all documents in the collection. The information is printed into citations. Another component of NARIC services is a database entitled ABLEDATA, which covers aids, equipment, and technological devices of use to disabled persons. NARIC's total collection consists of over 5,000 research reports, monographs, and audiovisual materials; over 1,000 reference books; and over 200 journals and newsletters related to rehabiltiation.

National Technical Information Service (NTIS)
5285 Port Royal Road
Springfield, VA

NTIS, an agency of the U.S. Department of Commerce, is the central source for the public sale of U.S. Government-sponsored research, and

development reports, as well as for foreign technical reports and other analyses prepared by national and local government agencies, their contractors, or grantees. It is the central source for federally-generated machine processable data files, and manages the Federal Software Center for Intragovernment Distribution. The NTIS bibliographic database can be accessed through Lockheed Information Services. The information functions now performed by NTIS were authorized by Public Law 81-776 (1950). This law directed the Commerce Department to set up and maintain a national clearinghouse for scientific and technical information. Previously, it was known as the Clearinghouse for Federal Scientific and Technical Information. It was established under its present name in 1970. Of interest to professionals working with hearing impaired persons are those NTIS's published searches on topics such as auditory defects, nonverbal communication, and auditory perception. NTIS is in the process of investigating possibilities for assuming at least part of the database for the former Smithsonian Science Information Exchange (SSIE), which terminated October 31, 1981.

Clearinghouse on the Handicapped
Office of Special Education and
Rehabilitative Services
U.S. Department of Education, Room 3119
Switzer Building
Washington, D.C. 20202

The Clearinghouse on the Handicapped is a resource for information providers serving handicapped individuals and service personnel. Created by the Rehabilitation Act of 1973, it was reauthorized by the 1978 Amendments,

and again reauthorized by the Omnibus Budget Reconciliation Act of 1981. The Clearinghouse is under the auspices of the Office of Special Education and Rehabilitative Services, of the Department of Education, and its bimonthly newsletter Programs for the Handicapped focuses on federal activities affecting handicapped persons. Information on federal legislation affecting handicapped individuals, and federal funding for programs serving handicapped people is provided upon request, as is technical assistance to information providers.

Human Services Information Center (HSIC)
1408 N. Fillmore Street, Suite 7
Arlington, VA 22201

The Human Services Information Center was formed in 1981 to provide information on the significant changes in human service programs, policies, and practices. Human services is defined by the center in a broad sense to include health services, education, social services, rehabilitation, community services, Social Security, public assistance, Medicaid, food assistance, housing assistance, community development, and emergency assistance. HSIC users include public officials, service providers, academicians, consumers, advocates and private citizens. Services offered are publications, presentations, policy study reports, training, and consultation. Since its formation, the center has organized and conducted a series of nationwide Information Seminars on block grants, budget reductions, and changes in legislation affecting human service programs. It has published A Citizen's Guide to Changes in Human Service Programs. This

book provides comprehensive information on human service programs by summarizing the President's proposals, budget levels authorized by Congress, changes in legislation, new block or categorical grants, and proposed allocations to States for block grants. HSIC is in the process of developing newsletters dealing with changes in human services, and innovations in service delivery to meet the emerging needs of the 80s. HSIC plans to assist States through consultation on plans to offset the loss of federal funds and to implement block grants.

National Information Center on Deafness (NICD)
Gallaudet College
Kendall Green
Washington, D.C. 20002

A program of Gallaudet College, the National Information Center on Deafness (NICD) began operation in fall of 1980, following a one year planning project funded by the federal government. NICD, in collaboration with appropriate Gallaudet offices, responds to requests by providing direct information, or by making referrals to appropriate organizations or centers. Although it does not provide searches of computerized bibliographic databases, NICD does provide topical bibliographies that are continually updated. Other services offered include telephone/TTD responses, brochures, fliers, and fact sheets.

Technology Monitoring Project
Rehabilitation Engineering Center
Gallaudet College
Kendall Green
Washington, D.C. 20002

The Rehabilitation Engineering Center is a new program of the Gallaudet Research Institute. It is directed by Dr. James Pickett, who heads the Institute's Sensory Communication Research Laboratory.

With the cooperation of the Massachusetts Institute of Technology (MIT), the Gallaudet Research Institute has organized the REC with over one million dollars in support from the National Institute of Handicapped Research (NIHR) extending over a period of three years.

One of the six projects of the REC is a permanent monitoring unit to acquire information about current devices and future technology, and further to act as an information resource, answering request and surveying needs. This project will monitor technology from the communication and electronic industries that can be used to improve communication for deaf and hard-of-hearing persons.

The REC program will be surveying hearing-impaired persons to determine their perceptions of needs, and their suggestions for devices that might enhance their ability to communicate; to set up a system for comprehensive and continuing monitoring of communication technologies that have, or might have, application to hearing impaired persons; to assess hearing of people with cochlear implants, and develop training programs for such individuals to maximize their functioning following surgery; to develop and test

wearable tactile receivers; to develop speech training devices including voice-sensing devices; to develop new hearing tests using speech rather than pure tones as the stimulus.

Among the topics planned for inclusion in the computer based information system will be: Assistive devices to compensate for loss of hearing in public meetings, churches, synagogues, and similar places of public assembly; devices to aid in the use of the telephone by hearing impaired persons; devices in the home or office to alert, the hearing impaired individual to events that involve their health, safety, and will facilitate communication; speech recognition systems will expand expressive and receptive communication capabilities of deaf and hard-of-hearing persons. Among themselves and with the normally hearing; utilization of personal computers for such areas as electronic mail, vocational training, and shopping, by deaf and hard of hearing persons.

Table 1

THE ERIC CLEARINGHOUSES

ADULT, CAREER AND
VOCATIONAL EDUCATION
Ohio State University
National Center for Research in
Vocational Education
1960 Kenny Road
Columbus, Ohio 43210

COUNSELING AND PERSONNEL SERVICES
The University of Michigan
School of Education Building
Room 2108, East Univ. & South Univ.
Ann Arbor, Michigan 48109

ELEMENTARY AND EARLY CHILDHOOD
EDUCATION
University of Illinois
College of Education
Urbana, Illinois 61801

EDUCATIONAL MANAGEMENT
University of Oregon
Library Room 108
Eugene, Oregon 97403

HANDICAPPED AND GIFTED CHILDREN
The Council for Exceptional Children
1920 Association Drive
Reston, Virginia 22091

HIGHER EDUCATION
George Washington University
1 Dupont Circle, Suite 630
Washington, D.C. 20036 630

INFORMATION RESOURCES
Syracuse University
School of Education
130 Huntington Hall
Syracuse, New York 13210

JUNIOR COLLEGES
University of California
96 Powell Library Building
Los Angeles, California 90024

LANGUAGES AND LINGUISTICS
Center for Applied Linguistics
3520 Prospect St., N.W.
Washington, D.C. 20007

READING AND COMMUNICATION SKILLS
National Council of Teachers of
Education
1111 Kenyon Road
Urbana, Illinois 61801

RURAL EDUCATION AND SMALL SCHOOLS
New Mexico State University, Box 3AP
Las Cruces, New Mexico 88003

SCIENCE, MATHEMATICS AND
ENVIRONMENTAL EDUCATION
Ohio State University
1200 Chambers Road, Third Floor
Columbus, Ohio 43212

SOCIAL STUDIES/SOCIAL SCIENCE
EDUCATION
855 Broadway
Boulder, Colorado 80302

TEACHER EDUCATION
1 Dupont Circle, N.W., Suite 616
Washington, D.C. 20036

TESTS, MEASUREMENT, AND EVALUATION
Educational Testing Service
Princeton, New Jersey 08540

URBAN EDUCATION
Teachers College
Box 40
Columbia University
New York, New York 10027